

## ORTHOPTEROLOGICAL CONTRIBUTIONS.

BY P. R. UHLER.

## GRYLLODEA.

## GRYLLOTALPA, Lat.

**G. cultriger.**

Cinnamon-brown, rather less elongated than *G. longipennis* Scudder. The head fuscous above; ocelli very large, oblong-oval, placed obliquely, diverging posteriorly; palpi, antennæ and cheeks pale cinnamon-yellow. Thorax of the ordinary form. Tegmina broad, long, covering the dorsum of the four basal segments of the abdomen, the anterior flap with no transverse nervures between the obliquely longitudinal ones; wings reaching the tip of the cerci, which are long and very slender. The anterior portion of the intermediate coxæ and the fossorial dactyls almost to their bases, and a few prominences upon the anterior coxæ, black; the dactyls shorter, broader and blunter than in *G. longipennis*. The process of the anterior coxæ is rather long, broad, acute at tip, cultrate; the posterior tibiæ with a row of stout spines, beginning at the middle and becoming gradually longer to the tip.

Lengths 27 millims. Length of thorax 8 millims. Posterior tibia  $6\frac{1}{2}$  millims.

*Hab.* El Paso.

The unique specimen, a male, was kindly presented to me by Henry Ulke, Esq.

## PHYLLOPALPUS, nov. gen.

Head depressed, broader than the thorax, front a little convex between the antennæ; eyes large, prominent, subglobose; ocelli not apparent; antennæ at least twice the length of the body, almost capillary, situated upon the inferior line of the eyes, a little between them, the basal joint cylindrical, longer than broad; maxillary palpi large, the joints hairy, the apical one much longer than the others, very broad, lamelliform, oval, the preceding joint subtriangular, much broader than the middle one, remaining joints subcylindrical, the basal ones glabrous: thorax subcylindrical, narrower anteriorly, the anterior and posterior margin truncate, the lateral margin broadly recurved; scutellum inconspicuous; tegmina as long or longer than the body, wings nearly

or quite the same length as the tegmina : ovipositor-sheath compressed, curved upwards ; abdomen small, nearly or quite concealed by the tegmina ; cerci slender, legs rather slender, anterior tibiæ compressed at base and furnished with a tympanum, basal joints of all the tarsi very stout, cylindrical, longer than the two others together, the middle joint very short, hairy, posterior tibiæ with a row of very long stout spurs each side behind, the basal tarsal joint of the hind legs armed with a long, stout, curved spur on the under side.

**P. pulchellus.**

Shining blackish brown ; head minutely punctured and together with the thorax bright crimson red ; antennæ yellow, hairy, blackish at base, palpi blue-black, eyes brown ; thorax glabrous, rather more coarsely punctured than the head, especially at the base. the lateral recurved margin pale yellow, the middle impressed line abbreviated ; tegmina chestnut brown, the sides darker, with paler nervures ; abdomen blackish, cerci, ovipositor, coxæ, trochanters and legs pale yellow, tarsal joints and nails tipped with blackish.

Length to tip of tegmina 7 millims. Ovipositor  $3\frac{1}{2}$ . Post. femur 5 millims.

It inhabits Prince George County, Maryland ; commencing to be fully winged about the middle of August. It is found quite abundantly amongst the grass and low bushes near ditches, and jumps about with great rapidity ; the great length of the tarsal spurs no doubt greatly assisting it in so doing. I have also a female in my collection which was taken near the city of New York.

**OROCHARIS, nov. gen.**

Head narrower than the base of the thorax ; cranium more or less excavated ; face very oblique ; front depressed between the eyes, produced at the upper line of the antennæ and convex between the antennæ ; ocelli approximate, placed triangularly upon the depression of the front ; eyes large, oval, prominent ; antennæ situated within the lower line of the eyes, and a little between them, setaceous, almost capillary, more than thrice the length of the body ; maxillary palpi having the basal joints short, the third joint longest, cylindrical, the fourth shorter than the fifth, slightly thickened at tip, apical joint somewhat dolabriform, obliquely truncated. Thorax narrower than the tegmina, truncated anteriorly, middle line impressed. Tegmina much

longer than the abdomen, very regularly reticulated, tapering posteriorly, wings (when fully developed) much longer than the tegmina. Anterior tibiæ thickened, femora short, robust. Tarsi of the two pairs of anterior feet with the basal joints dilated, the middle joint about two-thirds the length of the basal one, the apical joint very slender, nearly as long as the two preceding ones together. Spurs at the apex of the basal joint acutely recurved, longer than the middle joint. Ovipositor curved, of the normal form; cerci rather long, and slender.

**O. saltator.**

Pale clay-yellow, lustrous; head with a fuscous line behind the eyes, the upper side of which is margined with a pale streak, face and cheeks pale, almost white, dotted with fuscous, front and vertex more or less clouded with fuscous, antennæ and palpi annulated and the eyes obliquely striated with fuscous, upper surface of the head covered with short pile. Thorax pilous, with a more or less depressed, irregular, longitudinal fuscous line upon the middle and a broad one each side below which touches the latero-dorsal margins, corresponding to and continuous with that upon the head, the inferior marginal surface pale, sides flat, smooth, subquadrate, the angles moderately rounded. Tegmina tapering towards the tip, the apex triangularly rounded and reaching almost to the tip of the cerci, the base more or less tinged with fuscous and the nervures with fuscous interruptions, dorso-lateral nervure pale yellowish, the lateral flaps broader than the depth of the abdomen and almost enveloping it, with the nervures of this part fuscous at base. Tergum polished, darker than the other parts of the body, ovipositor pitchy at back and tip, cerci very hairy, sprinkled with fuscous, tarsal joints more or less fuscous at base and tip, spines of the posterior tibiæ long, slender, tipped with fuscous, nine large ones each side and a number of shorter ones, basal joint of the posterior tarsi with a row of gradually increasing spines each side above, three in number and two long spurs at the apex, which project beyond the tip of the second joint and are curved upward at tip.

Length to tip of abdomen 14 millims. Tegmina  $14\frac{1}{2}$  millims. Ovipositor 11 millims. Posterior femur 9 millims ♀. Length to tip of abdomen 12 millims. Tegmina  $11\frac{1}{2}$  millims. Posterior femur 7 millims ♂.

This species is found in great abundance upon hedges of *Cratægus*,

near the city of Baltimore, during the months of September and October. The male is rather smaller than the female, his posterior legs are shorter and the veins of the dorsal area of the tegmina being very few, the fuscous interruptions are also much less numerous. Specimens have also occasionally been taken upon the Oak.

**HAPITHUS**, nov. gen.

Form short and robust, the males a little more elongated. Head almost globose, narrower than the base of the thorax, hairy above, face very oblique, cranium very convex, front with a broad longitudinal ridge; eyes globose, deeply seated, ocelli small, placed as in *Nemobius*, Serv. Antennæ thrice the length of the body to tip of abdomen, setaceous, becoming capillary at the tip, situated within the lower line of the eyes, a little between them, the basal joint very much thicker than the succeeding ones, cylindrical. Maxillary palpi stout, longer than the face, the apical joint as long as the 2d and 3d together, subdolariform at tip, moderately obliquely truncated, the third and fourth cylindrical, the former about one-third longer than the fourth. Thorax clothed with long hairs above, with no carina at the superior boundary of the sides, the inferior margins of the sides strongly rounded, and the sides a little depressed anteriorly and posteriorly interior to the edge, the dorsal surface somewhat rounded, its anterior margin truncated. Tegmina not covering the apex of the abdomen, the reticulation of the discoidal field very ramose ♂, and the apical portion likewise in the ♀, the latero-dorsal nervure very carinately elevated, the longitudinal nervures beneath it also very prominent, wings rudimental. Cerci very long, slender, clothed with very long hairs; the ovipositor of the normal shape, slender, curved upwards. Legs very hairy, the posterior femora robust, compressed, the anterior femora very slightly compressed below the knee, with the tympanal cavity small and inconspicuous, posterior tibiæ with long slender spines which are curved at the tip, and between them each side is a continuous row of short denticles; spurs of the basal joint of the posterior tarsi at least 6 in number, the apical one each side reaching the tip of the second joint, the last joint slender.

**H. agitator.**

Pale dull fulvous, face yellowish-white, dotted and sprinkled with fuscous points, cranium fulvous, densely clothed with yellowish pubes-

cence; eyes pale brown; ocelli white, the basal joints of the antennæ dotted with brown; palpi spotted with brown, the apex of the terminal joint fuscous. Thorax densely covered with brownish-yellow hair, the lateral, anterior and posterior margins pale, the edge of the two latter sometimes pointed with brown. Tegmina barely reaching the tip of the antepenultimate segment, having the apex triangular upon the exterior flap and rounded upon the interior one, the nervures with a tinge of ferruginous-yellow, occasionally marked with brown, the longitudinal nervure of the anterior margin ♀ very stout, parallel, with very few cross-nervures, those of the disk very irregular, and not very prominent, the lateral bounding nervure white, the lateral flaps broad, embracing the abdomen in its whole depth at base. Tergum closely sprinkled with reddish-brown, and spotted with fuscous at sides and towards the apex; venter yellow, sometimes spotted with brown; ovipositor with a narrow brown line extending along its length, the tip piceous. Legs hairy, dotted with brown, the apices of the tarsal joints fuscous, spines of the posterior tibiæ about 10 in number, shining yellow, and fuscous at tip, the apex of the posterior femora dusky.

Length to tip of abdomen 10 millims. Ovipositor 8 millims. Posterior femur 8 millims. Posterior tibia  $8\frac{1}{2}$  millims.

It inhabits Grape vines and dense shrubbery near Baltimore, and is found fully developed about the middle of September. The description is taken from specimens of several months standing; the living insect is brighter and lighter in its coloring. The male is very scarce, only a single specimen has occurred to me in several years collecting.

#### GRYLLUS, Linn.

##### *G. personatus.*

Pale yellow, form of *G. neglectus*, Scudder. Head minutely shagreened above, yellow, with some vestiges about the antennæ and a short transverse band between the eyes, black, the cranial surface is covered by a large black spot, which is incised anteriorly, each side of the middle, and above each eye, immediately below the middle ocellus the surface is indented, forming a short transverse impression; eyes black, surrounded with a narrow yellow edge; cheeks prominent; tips of the mandibles piceous; basal joints of the antennæ more or less brownish. Thorax black upon the dorsal surface, the sides yellow, with a blackish spot above the middle, the very narrow elevated sub-

margins piceous; the middle dorsal line strongly indented. Tegmina dusky-fuscous, whitish yellow at base and sides, reaching to the penultimate segment, the nervures deep brown, excepting upon the sides, where they are yellow; wings of about the same length as the tegmina. Tergum black, the edges of the segments and a few broader stripes at the lateral edges of the three last segments, and the cerci yellow. Venter yellow, with a row of black dots each side. Ovipositor about the same as in *G. neglectus*, Scudd. Legs yellow, the posterior femora exteriorly having the oblique ridges of the posterior portion and a spot just before and one upon the patella brown, the interior surface superiorly is closely spotted with fuscous; posterior tibiæ beneath, and the tips of the spines piceous.

Length from front to end of abdomen 15 millims. Ovipositor  $13\frac{1}{2}$  millims. Posterior femur 10 millims.

*Hab.* Kansas.

The only specimen which I have seen is a female, and was kindly given to me by Mr. Henry Ulke. The vertex has a deep indentation upon it, but as it shows slight evidences of a crack at that point, it may have been occasioned by being crushed. The antennæ and cerci are for the most part broken off of this specimen.

## LOCUSTINA.

### **CAMPTONOTUS**, nov. gen.

Form similar to *Ceuthophilus*, Scudd. Head large, oval, much broader than the prothorax and not deeply sunken into it. Eyes ovate, vertical, situated on the sides but little behind the basal joint of the antennæ, and exceeding it a little in length. Face, vertex and cheeks convex. Maxillary palpi long, the last joint as long as the preceding one, a very little inflated at the tip. Antennæ at least five times the length of the body without the ovipositor. Pronotum trapezoidal, the sides not carried downwards as far as the lower line of the eyes, the lateral margins somewhat broadly recurved; meso- and meta-notum very small, confined to the dorsum and not prolonged downwards upon the sides, their transverse diameter thus being but little more than half that of the pronotum, their sides also recurved. Females essentially apterous. Dorsal segments of the abdomen about equal in length, the two posterior ones shorter than the rest; cerci very short, slender, hairy.

Ovipositor ensiform, curved upwards, compressed, acute. Legs very short, moderately stout; the anterior and middle tibiæ slightly incurved near the base, having a row of four long spines each side beneath; posterior femora with a few short teeth underneath, near the tip; posterior tibiæ with distant very short spines each side behind. Tarsi stout, 4-jointed, with split cushions beneath, the first joint equal in length to the two following ones conjoined.

### C. Scudderi.

Ochraceo-testaceous, yellowish-white beneath. Face pale yellow, tips of the mandibles and eyes black; the head anteriorly very moderately convex, produced downwards and narrow at tip, epistoma trapezoidal, transverse, much shorter than the labrum, labrum cordate, emarginate at tip, longer and narrower than the epistoma, palpi long and slender, with a minute rounded joint at the tip. Dorsum of the abdomen deeper in color than the other surface, becoming paler inferiorly, the posterior edges of the segments more or less dusky, the three last segments with a common blackish spot; beneath, pale. Cerci very short, slender, hairy. Ovipositor long, very much curved upwards, the valves flat, acute at tip. The legs moderately stout, anterior and middle femora stouter, shorter and more curved than in *Ceuthophilus*; the tarsi are also stouter and shorter.

Length from vertex to tip of abdomen  $11\frac{1}{2}$ –13 millims. Posterior femur 6–7 millims. Posterior tibia  $7\frac{1}{2}$ –8 millims.

This insect is found near Baltimore upon Oak trees. It appears in the larva state as early as the first of August and can be met with fully developed, from the latter part of September until some time in October. I have also seen a specimen from Delaware, in the cabinet of the Entomological Society of Philadelphia.

It seems to form a connecting link between the Rhabdiphoroid forms of the family and the true green Locustina. Possessing much of the structure of head and tarsi, and form and position of the antennæ and eyes as in some species of the genus *Phylloptera*. The eyes are not directly in front, approaching, as in some *Ceuthophili*, they are much longer than broad and placed, not above, but outside of the antennæ, the first joint of which is almost of the same breadth; the third joint of the maxillary palpi is as long as the fourth, and the fourth is but very little enlarged at tip. The reduced size of the meso- and

meta-notum, and the short cerci recall to mind the atrophied condition of the former, and the form of the latter in *Stenopelmatus*, but the group of heavy spurs at the ends of the tibiæ, and other characters of that genus, widely separate this from it. The male is unknown to me, but from a male of a species of this same genus, in my possession, from the Island of St. Thomas, it may prove to have rudimentary tegmina. There is no exhibition of a tympanum or auditory apparatus upon any of the legs.

**ANABRUS**, Hald.

**A. purpurascens.**

Brown with a tinge of purple, mottled with yellow, form similar to *A. simplex*, Hald. Face greenish or carneous-yellow, broad, somewhat flattened; eyes brownish-glaucous; the transverse suture below the front black at the exterior corners of the epistoma; tips of the mandibles piceous-black; antennæ slender, as long as the body omitting the head, yellow at base, and becoming lurid, and at the tip blackish; joints of the maxillary palpi more or less glaucous; cranium glaucous or lurid brown, in some specimens (usually females) with the vertex and four longitudinal stripes carneous-yellow. Thorax rather short, flattened above, posteriorly, with a transverse moderately impressed line behind the middle, and two short oblique anteriorly divergent impressions before the middle; the surface smooth, lurid glaucous, with an anteriorly dilating purplish-brown line at sides below the dorsal edge, the lateral margins broadly, and the anterior margin, less distinctly yellow; anterior angles rounded, the posterior margin truncated. Tegmina covered by the prothorax, yellow, with lurid purplish nervures; in the female the nervures are fine and longitudinal, very ramose; in the male the branching nervures are confined to the margins, the middle field being surrounded by very stout nervures, and on the middle of this field is a stout nervure the ends of which run divergently backwards. Abdomen and surface beneath the prothorax purplish-brown, closely mottled with yellow. Ventral surface of the fully colored males dull in color, the mottling being pale and not distinct and the pectoral surface including the coxæ yellow, the last ventral segment deeply emarginated at tip, and furnished each side with an articulated cylindrical appendage; in the female the inferior surface is yellow with a more or less glaucous or lurid tinge. Ovipositor



moderately curved, lurid yellow, piceous at tip; cerci of the female hardly longer than the segment beneath which they are placed; no cerci present in the males, but their place is supplied by short, stout cylindrical appendages which are bifurcated at tip, the branches acute and curved inwardly, the inferior branch being much longer and tapering more to the tip than the superior one. Legs, in the fully colored specimens, deep purplish-brown, mottled with yellow upon the anterior femora, and reticulated with yellow on the exterior side of the posterior femora; posterior legs comparatively short, the spines tipped with black; the denticuloid process above the anterior coxæ triangular at base, acute at tip, about as long as the coxa; the legs in pale specimens are largely pervaded with yellow.

Length to tip of last segment ♂.  $32-33\frac{1}{2}$  millims. Length of prothorax 11 millims., breadth at apex 7 millims. Posterior femur  $18\frac{1}{2}$  millims. ♀ Length to tip of last segment  $34-36$  millims. Posterior femur  $18-19$  millims. Ovipositor  $20-21$  millims.

*Hab.* Minnesota (Kennicott); Washington Territory (Dr. Suckley); Texas (Dr. Horn).

This species was found by Mr. Robert Kennicott in considerable numbers near the Red River in Northern Minnesota; for the specimens examined and here described I am indebted to his generosity. From all the species previously described it differs in many particulars from the characters given by the describers. It seems to approach the most nearly to *A. simplex*, Hald., in the shape of the limbs, &c., but the markings are widely distinct.

For the distinctness of this genus from *Thyreonotus*, Serv., I can by no means vouch; a sufficient examination of all the species hereafter may render it necessary to unite them into one genus. The measurements given are the result of an examination of twenty specimens of both sexes.

#### CYPHODERRIS, nov. gen.

Form short, robust. Head globose superiorly, deeply inserted into the prothorax, very wide and flat between the antennæ; eyes subglobose, placed rather before the sides, immediately exterior to the sockets of the antennæ; antennæ longer than the body, scarcely attenuated at tip, being almost of equal thickness throughout, basal joint long, stout, cylindrical, the second scarcely more than half as thick, and less

than half as long, the third longer than the second; space between the antennæ not elevated into a ridge; epistoma very short and broad, the labrum longer, much narrower, rounded on the lower margin, on the middle of which there is a slight, triangular production; mandibles very stout; apical joint of the maxillary palpi about one-fourth longer than the preceding one, obliquely truncated at tip, the penultimate joint equal to the antepenultimate; cheeks broad, but not prominently dilated. Anterior part of the prothorax amplified, so as to cover the base of the head like a hood, its anterior margin subtruncated, the lateral margins becoming gradually obliquely narrowed posteriorly, not sinuated, the extreme edge carinately elevated, dorsal surface transversely, deeply depressed before the middle, behind the middle much broadened, flat. Tegmina broad, ample, but not reaching the apex of the abdomen, covered with well developed, closely reticulated nervures, excepting only a small area of the discal base, the costal flap extending low down upon the sides. Legs short, stout, the anterior tibiæ dilated upon the middle, and bearing a very long and broad tympanal cavity, the exterior face with a moderate spine just below the middle, the interior face bearing two similar spines each, nearer the tip, the tip with a coronet of four spines surrounding it: exterior face of the intermediate tibiæ with three spines on one side and two on the other, upon the interior face and apex they are the same in number and position as upon the anterior tibiæ; laminate carina of the inferior part of the posterior femora continued to the tip, patellæ very small; posterior tibiæ curved inwards, dilated from the base to the tip, prismatic, with the edges rounded, the posterior face with six remote, stout spines on one side and four on the other, exclusive of the apical coronet; tarsi long, compressed, basal joint about two-thirds the length of the apical one, the second one about half the length of the basal, and more than twice the length of the third, plantulæ small, rounded, not dilated nor cleft. ♂.

**C. monstrosus.**

Pale dull yellow; cranium black, with five pale lines upon it, the intermediate ones converging anteriorly; face yellow, with black sutures, tips and sides of the maxillary palpi, and uncovered portion of mandibles blackish; antennæ piceous, more or less yellow at base, the first joint yellow upon the middle; eyes dark brown, but little longer

than broad, covering a large part of the base of the tegmina, and of a very thin, scale-like consistence; color dull clay-yellow, the anterior lobe brassy-black (omitting the anterior margin and the anterior portion of the sides, which are whitish-yellow) and this color extends in a broad continuation each side, obliquely backwards; an elongate oval impression upon the disk before the middle is also black; the posterior lobe flat above, and densely longitudinally wrinkled; anterior angles sub-rect, the posterior margin broadly rounded. Tegmina pale brown above, yellow at sides, becoming almost white upon the costal margin, the neuration reddish-brown, very dense and ramose. Abdomen more or less invaded with black above and upon the sides and behind, the two rows of lateral stigmata black; venter rufous, with a row of black points each side; anal and genital appendages very complex, the cerci compressed, reflexed at tips, between these is a large triangular, bilobate prominence, with an acuminate process on each lobe, each side below this is a spatulate appendage, curved inwardly, beneath these on the middle is a pointed keel-like elevation, projected backwards upon the segment, grooved and emarginated at tip; the elevated segment upon which the two lower appendages are placed is emarginated in the middle and has a small lobe each side of the emargination. Pectus black, spots above the coxæ, and the coxæ and trochanters in part yellow. Legs yellow, polished, striped and marked with black within and without; the two anterior pairs of femora faintly sulcated on both faces, the posterior femora sulcated on the exterior face, the underside with a carina upon edges, the intermediate tibiæ faintly and the posterior pair within and without distinctly grooved.

Length to tip of abdomen 16, and 22 millims. Breadth of thorax posteriorly 7, and 9 millims. Posterior femur  $8\frac{2}{3}$  and 12 millims. ♂.

*Hab.* Oregon Territory (Dr. Suckley.)

The specimens examined were two males kindly presented to me by Mr. Henry Ulke. The anterior legs are proportionately more developed, in comparison with the posterior ones, than is the case in any of the allied forms yet described from this country.

## ACRIDIODEA.

### STENOBOTHRUS, Fischer.

#### *S. admirabilis.*

Bright grass-green; labrum green, carneous at sides and white in

front, the apex broadly, triangularly emarginated; face coarsely, remotely punctured, the vertical ridge broad, not channelled, each side of the front near the eyes is a vertical, slightly elevated carina; base of the mandibles and an oblique streak behind the eyes, and the lower and posterior edge of the cheeks carneous; eyes brown, elongate-oval, the upper end conically subacute; antennæ and palpi carneous-reddish, the base of the former and the sutures of the latter white, tips of the antennæ dusky; cranium with a broad carneous stripe, which reaches from the base to the apex, at which point it conforms to the shape of the vertex, it is also bounded each side by a faintly impressed line; the foveolæ upon the upper extremity of the vertex long and broad, the edge just exterior to them elevated and bright green; the middle of the disk somewhat scabrescent. Prothorax bright green, narrow, the dorsal middle with a broad carneous stripe continuous with that of the head, entire, each side of this is a black line dilating posteriorly, the lateral dorsal boundaries elevated into blunt carinæ, just below these is a slender black streak; sides with a very broad carneous or brownish stripe, the posterior lobe of the prothorax both above and at sides tinged with pale green, and reticulately scabrous, carinate line of the dorsal middle distinct. Tegmina smoky-blackish, with a broad green stripe running upon and each side of the strong nervure bounding the discoidal field anteriorly, the posterior margin of this stripe is invaded by series of oblong black spots; the anal field is covered by a second green stripe, which conforms to its shape and becomes obsolete at tip; wings smoky, especially at tip, the base posteriorly greenish-yellow. Abdomen carneous, obscured at base above. Pectus and anterior pairs of legs carneous or lurid-greenish; upon the pleura, beneath each wing, is a quadrate, oblique, green spot. Posterior femora green, the upper lateral carina whitish, and beneath it a purplish-black streak, the inferior lateral carina white and bounded above by a white streak, the under surface pale carneous or greenish-white, the two inferior carinæ bearing each a row of black specks; patellæ and apical two-thirds of the posterior face of the tibiæ dusky-blackish, spines white with their tips black; tarsi carneous, more or less blackish towards the tip.

Length to end of abdomen 36 millims. Alar expanse 54 millims. Posterior femur 24 millims. ♀.

*Hab.* Baltimore. Late in August, among the grass.

This species has not yet been met with in any abundance here. The wing-covers are comparatively narrow, the costal margin a little dilated near the base; the surface against the thick nervure bounding the discoidal field posteriorly is sometimes tinged with a streak of rosy almost throughout its entire length. The colors are taken for the most part from a fresh specimen not immersed in alcohol.

**PEZOTETTIX**, Burm.

**P. Scudderi.**

Ferrugineo-fuscous, form and general appearance of *Caloptenus femur-rubrum*, De Geer. The cranium is, however, less prominent, the thorax slightly broader, and in the ♀ the black spot on the sides, just below the dorsal surface, is much narrower, sometimes entirely obsolete, the whitish spots upon the middle of the sides are indistinct and sometimes entirely obsolete; the wing-covers do not reach much beyond the apex of the second segment of the abdomen, the under side of the posterior femur is yellow, and the tibiæ have a black dot upon the knee and a black ring just below it; the apical tip of the last segment ♂ is more narrowed, acute, and conically produced than in *C. femur-rubrum*. In its other characters it agrees with that species.

Length ♂ 16—17, ♀ 22—23 millims.

*Hab.* Baltimore; upon the sides of high hills. Rock Island, Ill., (Walsh.)

It is found in great profusion during the latter part of October. It is a completely developed insect, for I have taken many pairs in coitu.